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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,603	02/28/2002	Kyoko Kobayashi	0992-0128P	3606

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EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,603

Applicant(s)

KOBAYASHI ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Objections

1. Claim 14 is objected to because of the following informalities: the term “an” needs to be added before the phrase “cross-linking agent”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 7, and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 360 577. EP'577 teaches a laminate comprising a substrate of a foamed olefinic thermoplastic elastomer and a skin layer of a non-foamed olefinic thermoplastic elastomer (abstract). EP'577 discloses the laminate comprising a mineral oil lubricant (page 3, line 55). EP'577 teaches the foam layer comprising polyethylene resin and ethylene/alpha-olefin copolymer in a weight ratio of 95/5 (table 1, page 3, lines 24-25). The same token is applied to the composition in the skin layer. EP'577 teaches the copolymer based on

ethylene/alpha-olefin having a Mooney viscosity ML_{1+4} (121°C) of 40 to 80 and an ethylene content of 70 to 85 mole % (page 3, lines 48-50). Since EP'577 is using the same materials with similar concentration of the individual components to form the foam substrate, it is the examiner's position that the Mooney viscosity would be inherently present. Note In re Best 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made under 35 USC 102. Products of identical chemical composition can not have mutually exclusive properties. In re Spada, 15 USPQ 2d 1655 (1990). As the disclosed Mooney viscosity is measured at a different temperature, it is not comparable with the claimed Mooney viscosity and treated as an alternative measurement of the physical property of the copolymer based on ethylene/alpha-olefin.

With regard to claim 3, table 1 of EP'577 shows the tensile strength, surface hardness, torsion modulus and as well as elongation of the laminate. They are other alternative measurements of the physical properties of the laminate. Since the laminate of EP'577 as modified as EP'617 meets the recited structure, it is the examiner's position that the physical properties set out in the claims would be inherently present.

5. Claims 2, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 360 577. EP'577 teaches a laminate comprising a substrate of a foamed olefinic thermoplastic elastomer and a skin layer of a non-foamed olefinic thermoplastic elastomer (abstract). EP'577 discloses the laminate comprising a

mineral oil lubricant (page 3, line 55). EP'577 is silent as to the amount of a lubricant in the composition. Since the amount of a lubricant is not critical to providing unexpected technical advantages and such a variable would have been recognized by one skilled in the art. In an absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the mineral oil with the amount instantly claimed in the skin layer of the laminate motivated by the desire to improve the slide abrasion resistance of the skin layer.

With regard to claim 21, for melt flow rate limitation, see inherency rational with respect to claim 3 in the paragraph no. 3.

6. Claims 4-6, 8, 10-20, 22-24, and 26-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 360 577 in view of EP 0 974 617. EP'577 teaches the foam layer comprising polyethylene and ethylene/alpha-olefin copolymer in a weight ratio of 95/5 (table 1, page 3, lines 24-25). EP'577 teaches the copolymer based on ethylene/alpha-olefin having a Mooney viscosity ML_{1+4} (121°C) of 40 to 80 and an ethylene content of 70 to 85 mole % (page 3, lines 48-50). Since EP'577 is using the same materials with similar concentration of the individual components to form the foam substrate, it is the examiner's position that the Mooney viscosity would be inherently present. As the disclosed Mooney viscosity is measured at a different temperature, it is not comparable with the claimed Mooney viscosity and treated as an alternative measurement of the physical property of the copolymer based on ethylene/alpha-olefin.

EP'577 is silent as to the skin layer comprising an ultrahigh molecular weight polyolefin resin having an intrinsic viscosity of 3.5 to 8.3 dl/g as determined in decalin at 135°C. EP'617 teaches the skin layer comprising an ultrahigh molecular weight polyolefin resin having an intrinsic viscosity of 3.5 to 8.3 dl/g as determined in decalin at 135°C [0058]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the ultrahigh molecular weight polyolefin resin into the skin layer of the laminate of EP'577 motivated by the desire to provide the high efficiency of extrusion and increased strength and modulus of the laminate.

With regard to claims 5, 8 and 10, EP'577 discloses the laminate comprising a mineral oil lubricant (page 3, line 55). EP'577 is silent as to the amount of a lubricant in the composition. Since the amount of a lubricant is not critical to providing unexpected technical advantages and such a variable would have been recognized by one skilled in the art. In an absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the mineral oil with the amount instantly claimed in the skin layer of the laminate motivated by the desire to improve the slide abrasion resistance of the skin layer.

With regard to claim 6, EP'577 is silent as to the presence of a lubricant that includes organopolysiloxane, fluoropolymer or antistatic agent in the skin layer.

EP'617 teaches a composition suitable for use as a skin member of the laminate based on olefin. EP'617 teaches a skin member comprising 0.5 to 10 parts by weight

of fluoropolymer (E) ([0065], [0066]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fluorocopolymer as a lubricant in the skin layer of the laminate motivated by the desire to improve the slide abrasion resistance of the skin layer.

With regard to claims 11, 27, EP'617 teaches the ultrahigh molecular weight polyolefin is a combination of the ultrahigh molecular weight polyolefin and the low molecular weight to high molecular weight polyolefin [0058].

With regard to claims 12, 28, 31, EP'577 teaches the foamed laminate based on olefin comprising a polypropylene resin in an amount of 30 parts by weight or less per 100 parts by weight of total sum of the polyethylene resin and the copolymer based on ethylenen/alpha-olefin (page 5, lines 17-20).

With regard to claim 13, 35, Table 1 of EP'577 shows the foaming expansion ratio of the foamed body at least twofold.

With regard to claims 15, 30, 36, EP'577 teaches the laminate comprising a cross-linking agent (page 3, line 38).

With regard to claim 16-18, 32-34, EP'577 teaches the laminate comprising a foaming agent in an amount of 0.5 –20% by weight (page 3, line 61 et seq.).

With regard to claim 19, 20 and 22-24, 37, for melt flow rate and compression set limitations, see inherency rational with respect to claim 3 in the paragraph no. 3.

With regard to claims 38-40, EP'577 teaches the foamed laminate having been useful for applications in automotive internal trim parts (page 2, lines 5-10). EP'577 is silent as to the its applications as a sliding element or a sealing material. It has

been held that a recitation with respect to the manner in which a claimed foamed laminate is intended to be employed does not differentiate the claimed foamed laminate from a prior art thermoplastic elastomer laminates satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
8. Claims 1-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,221,963 in view of EP 0974 617. See discussions in the paragraphs no. 4-6 above. The combination of claims 1-12 of U.S. Patent No. 6,221,963 in view of EP 0974 617 does not teach the foam core. It would have been obvious to one having ordinary skill in the art at the time the invention was made to foam the core because it is a typical and desirable structure of the composite material widely used in automotive applications (a foam core/ skin).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426.

The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
March 6, 2003


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700